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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,708	08/30/2001	Jean Claude Brigaud	066829-5069	6238

9629 7590 02/02/2007
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EXAMINER

LEE, JOHN J

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/941,708

Applicant(s)

BRIGAUD ET AL.

Examiner

JOHN J. LEE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-8 and 10-14 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 9 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments with respect to claims 1 – 15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-3, 6-8, and 10-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoya et al. (US Patent number 5,524,287) in view of Mochizuki (US 6,580,901).

Regarding **claims 1, 8, and 14**, Yokoya teaches that a method of controlling amplification of a signal emitted by a radio communication terminal (radio communication apparatus such that portable telephone, see column 4, lines 57 – 62) including a power amplifier (14 in Fig. 2) and a power supply battery (34 in Fig. 2) (Fig. 2, 3 and column 3, lines 15 - 54). Yokoya teaches that detecting an output power of said amplifier and converting said output power into a first detected voltage (Fig. 2, 3 and column 4, lines 57 – column 5, lines 35, where teaches detecting output power (first detected voltage V33 by detector (33)) from the amplifier (14 in Fig. 3) by detector (33 in Fig. 3) and voltage converter converts the output voltage level (power)). Yokoya teaches that modifying said first detected voltage (first detected voltage V33) or a first set point

voltage (preset threshold voltage V_{th}) based on an output voltage level of said power supply battery (inherently modifying the first detected voltage provided by detector (41) through system controller to DA converter for path V31 based on variance of the power supply for the detected voltage level and preset point voltage level) to generate a second detected voltage or a second set point voltage (generating the output second voltage level depend on the detected voltage level and preset point voltage level see column 5, lines 44 – column 6, lines 67 and Fig. 3). Yokoya teaches that comparing said detected voltage (32 in Fig. 3 for comparing the detected voltage) with a set point voltage (Fig. 3, 8, column 2, lines 10 – 63, and column 7, lines 58 – column 8, lines 25, where teaches the comparator (32 in Fig. 3) compares the detected voltage from output of the detector (33) and the setting voltage from output of the system controller (21)). Yokoya teaches that adapting the input voltage of said power amplifier (14 in Fig. 3) (Fig. 2, 3 and column 1, lines 48 – column 2, lines 41, where teaches receiving the input voltage from outputting the power amplifier) based on said comparison (by comparator (32 in Fig. 3)) result (Fig. 2, 3, 8, column 1, lines 48 – column 2, lines 62, and column 7, lines 58 – column 8, lines 25, where teaches before comparator compares the detected voltage and setting voltage, the detected voltage or setting voltage causes to be depend on an output voltage of power supply (34 in Fig. 3) as see V_{cc} through power amplifier (14) in Fig. 3). However, Yokoya does not specifically teaches the limitation “modifying the detected voltage output of power supply to compare the first detected voltage with the second set point voltage or said second detected voltage with said first set point voltage to generate a comparison result”. However, Mochizuki teaches the limitation “modifying the detected

voltage output of power supply to compare the first detected voltage with the second set point voltage or said second detected voltage with said first set point voltage to generate a comparison result” (column 7, lines 35 – column 8, lines 64 and Fig. 6, 7, where teaches comparing the reference voltage (set point voltage) with the detected voltage (voltage a and voltage b) of power supply to generate the error voltage and transmit it to the gate terminal of high power amplifier and controlling by the feedback of the error voltage so that the detected voltage is brought close to the reference voltage). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Yokoya system as taught by Mochizuki, provide the motivation to achieve unnecessary increase in the average power consumption by the radio transmitter in mobile device.

Regarding **claim 2**, Yokoya and Mochizuki teach all the limitation as discussed in claim 1. Furthermore, Yokoya further teaches that the detected voltage is increased by a correction value dependent on said output voltage of said power supply battery to generate said second detected voltage (Fig. 2, 3, 8, column 1, lines 48 – column 2, lines 62, and column 7, lines 58 – column 8, lines 25, where teaches the detected voltage is changed caused in the voltage of said power supply to generate adjusted detection voltage).

Regarding **claim 3**, Yokoya and Mochizuki teach all the limitation as discussed in claim 1. Furthermore, Yokoya further teaches that the first set point voltage is reduced by a correction value dependent on said output voltage of said power supply battery to generate said second detected voltage (Fig. 2, 3, 8, column 1, lines 48 – column 2, lines

62, and column 7, lines 58 – column 8, lines 25, where teaches the detected voltage is changed caused in the voltage of said power supply to generate adjusted detection voltage).

Regarding **claim 6**, Yokoya and Mochizuki teach all the limitation as discussed in claim 1. Furthermore, Yokoya further teaches that the detected voltage or said first set point voltage is modified based on said output voltage of said power supply battery only within a limited range (the allowable range of transmission output) of the output power of said amplifier (generating the output second voltage level depend on the detected voltage level and preset point voltage level see column 5, lines 44 – column 6, lines 67 and Fig. 6, 7).

Regarding **claims 7, 10, and 13**, Yokoya and Mochizuki teach all the limitation as discussed in claim 1. However, Yokoya does not specifically disclose the limitation “the first detected voltage is modified based on the output voltage of the power supply battery only in a range of the output power of said amplifier close to 30 dBm”. However, Mochizuki discloses the limitation “the first detected voltage is modified based on the output voltage of the power supply battery only in a range of the output power of said amplifier close to 30 dBm” (column 4, lines 44 – column 5, lines 14 and Fig. 5, where teaches a detected voltage from the high output power amplifier by 24 dB from the selected maximum output level, the input level of the high power amplifier is reduced by 30 dB). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Yokoya system as taught by Mochizuki, provides the

motivation to achieve efficient controlling the range of output power for increasing the life of power supply battery in radio communication terminal.

Regarding **claim 11**, Yokoya teaches that the blocking means include a field-effect transistor (35 in Fig. 3) (Fig. 2, 3, 8 and column 1, lines 48 – column 2, lines 62).

Regarding **claim 12**, Yokoya teaches that the means for rendering said detected voltage or said set point voltage dependent on said voltage of said power supply battery include software means (Fig. 2, 3, 8, column 1, lines 48 – column 2, lines 62, and column 7, lines 58 – column 8, lines 25).

Allowable Subject Matter

4. Claims 4, 5, 9, and 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose “the means for rendering said detected voltage or said set point dependent on said voltage of said power supply battery include a subtractor between said comparator means and said power detector and converter means and the correction value is a multiple of $V_{bat} - V_{nom}$ where V_{nom} is the nominal voltage of said power supply battery and V_{bat} is the output voltage of the power supply battery” as specified in the claims.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mizusawa et al. (US Patent number 6,038,428) discloses Power Control Circuit for Transmission Apparatus.

Horii et al. (US Patent number 5,715,527) discloses Mobile Communication Device Having an Output Power Sensor Succeeding a Transmission Filter.

Information regarding...Patent Application Information Retrieval (PAIR) system... at 866-217-9197 (toll-free)."

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231
Or P.O. Box 1450
Alexandria VA 22313

or faxed (571) 273-8300, (for formal communications intended for entry)

Or: (703) 308-6606 (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to USPTO Headquarters, Alexandria, VA.

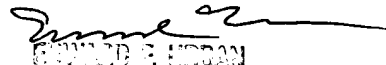
Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is **(571) 272-7880**. He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor,

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Edward Urban, can be reached on (571) 272-7899. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

J.L
January 16, 2007

John J Lee


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